352 [513] wooden sticks for fire-drilling, toilet articles, magic rattles etc. Contrary to the Chiriguano, the Choroti do not use bedsteads or hammocks, but sleep on the ground, with only an animal skin, or a woollen mantle between themselves and the ground.

[142 291]

Fig. 19. A man, with his daughters. Choroti. From the dry soil forest region between Caiza and Crevaux. Gran Chaco. Bolivia. Photo. E. v. R.

343 251 At the cooking-fires in front of the huts, the Choroti now and then erect square sheds, with flat, grass-covered roofs. These sheds are constructed like food-storing racks (fig. 28), and are used both as a protection from the sun and as sleeping places during hot nights According to Nordenskiöld, the Indians on the Pilcomayo use the roofs of these sheds for drying fish on.[1] I am of opinion that these sheds, originally, were only designed for the storing, drying, smoking or roasting of fish, and that, therefore, their use as shade-givers or sleeping-shelters is only

[1] Nordenskiöld (13), p. 36.

[Text continues on p. 47]

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

Fig. 27. Wooden digging-stick (wood of Bulnesia sarmienti). The handle and the spade-like point are flat, the rest, of round section. Choroti, Gran Chaco, Bolivia. 1/5. Riksm. 10. 3. 84.

a secondary one.[1] In Central Africa I have seen Wemba and Bisa men construct food-storing racks for smoking food, or drying it by fire. These racks are built on exactly the same plan as the cooking-sheds of the Choroti, although lower than the latter, and not covered with grass. That also the Indians of South America made use of drying or roasting racks, is evident from fig. 29, provided that this picture, reproduced from an account of travel in the 16th century,[2] actually is a faithful representation of an Indian roasting-rack.

The roasting-rack, such as it is reproduced above, may conceivably be a development of the food-storing rack discussed by me in chapter VII (pp. 198, 199), and in the following way: Those usually fairly tall racks that are built for the protection of food against damage from wild or domestic animals, are, as a rule, particularly well adapted for drying fish, etc. When the weather is unfavourable to sun-drying, the idea would present itself of assisting the preserving process by making a fire under the rack, by means of which the food would dry more quickly, at the same time that, through the action of the smoke, it would keep longer from decomposition. By lessening the height of the rack, in the way shown in fig. 29, the effect of the fire would be increased so much that the food would quickly be cooked, and ready for immediate consumption.

Fig. 28. Frame of cooking shed; also used as a food rack. Choroti, Gran Chaco, Bolivia. From Erland Nordenskiöld.

When the Choroti quit a dwelling-site in order to build their village elsewhere, they often burn their old

[1] Cfr. my theory as to the origin of pile building construction, pp. 193—196.
[2] Schmidel (I), p. 39.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

of the chaguar (chahuar).[1] This statement, which is erroneous, is due to the similarity of sound existing between chaguar[2] and chañar.[3] The *fruits* of the latter are eaten by the Indians, whilst of the former only the rootstock is edible.

By drying, the Choroti preserve vegetables against seasons of shortened food supply.

Personally I have not seen the Choroti use salt, but, nevertheless, they possess this condiment. Possibly they, like the Lengua, extract salt from the ash of a plant growing on the Chaco.[4] Salt-making from vegetable ash is known to many primitive peoples.[5]

Among the Choroti I never saw men and women eating together.

The preparing of food is, as a rule, the work of the women. The Choroti are not dainty about their food, and the uncleanliness which is a distinguishing trait in culinary matters among these Indians surpasses almost anything I have ever observed among other primitive peoples, with the exception of the Mataco Indians. Of the latter, however, my experience is limited to only a few families, and it may be unfair to judge the whole tribes from those.

Water, often muddy, ordinarily forms the drink of the Choroti. When in the dry season the Indians are on the move, or from some reason or other find themselves far away from any river, they sometimes suffer very badly from lack of water.

In the season for harvesting wild fruits, such as algaroba, tusca, and chañar, an intoxicating fruit beer is brewed. During the time of year that I visited the Choroti, there were no fruits of which any intoxicating beverage could be brewed; consequently I never had an opportunity of observing either the brewing of beer, or any drinking carousal. This led me to suppose that the art of brewing fermented liquor was unknown to the Choroti. Nowadays the Choroti have learnt from the Chiriguano also how to brew maize beer. Of the Choroti method of beer-brewing, Nordenskiöld has given the following description:

»When tusca beer is to be made, the fruit is first of all ground, and they water added, the whole being thereupon left in a dirty animal hide,

[1] von Rosen (3), p. 9.
[2] Bromelia serra.
[3] Gourliea decorticans.
[4] Hawtrey (1), p. 287.
[5] For one method of producing salt from plants, see von Rosen (4), p. 240.

2: Karsten E-5 (1911-1913)1932 SI7 Mataco SI7
Toba SI 12
Choroti SK 7

In disposition the three tribes show great differences. The *Choroti* are pleasant and cheerful, and display to a high degree that humorous spirit which is often characteristic of the Indian even when he looks serious. They are lazy and carefree and love amusement, feasting, dancing, and games above everything. When the Choroti Indian has plenty of food and algaroba beer for the moment, he makes merry and eats and drinks as much as he can, but has no thought for the morrow and does not store provisions like the more advanced Chaco tribes. This particularly holds true of the men; the women, who in general are more industrious, show more forethought in this respect, collecting wild fruits in great quantities when they are in season, and keeping the seed-corn till the following sowing. But on the whole poverty is an outstanding feature of the material culture of the Choroti, and this is no doubt due to a great extent to their own character.

The Choroti are — at least nowadays — a peaceful people, and in the insignificant wars they have sometimes waged with the Mataco on the other side of the river, they have manifested very little organization or discipline. As I was told by settlers on the Pilcomayo, the Choroti were formerly more warlike, and like other Chaco tribes, they were even in the habit of scalping those enemies whom they killed during their raids.

The *Mataco*, although anthropologically closely related to the Choroti differ from them considerably in character. The Mataco Indian is serious, taciturn, and gloomy, and in consequence more addicted to religion and superstition than his brother the Choroti Indian. At least nowadays, when the Indians are strongly influenced by European civilization, the Mataco Indian will not make a reliable servant and companion. Cleanliness is not a particular characteristic of the Choroti, but the Mataco are probably the dirtiest of all Chaco tribes. This too may in part be a consequence of their contact with the whites. On the other hand, the Mataco are more industrious and energetic than the Choroti, and accordingly, in their wars, have proved more valiant and capable of more organization than their primitive neighbours. In these respects the Mataco, at any rate the Bolivian tribes, resemble their neighbours the Tobas more than the Choroti.

As to the *Tobas*, their moral qualities and disposition have been described with much unanimity by many travellers. Nearly all have characterized them as bad, ferocious, treacherous, thievish, etc., qualities which they have especially displayed towards the whites. Typical on